

Neocorynura, a Genus of Halictine Bees (Hym.).

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Schrottky proposed the name *Neocorynura* for *Cacosoma* F. Smith, preoccupied. The species are very numerous in Peru, and adjacent parts of Bolivia and Brazil; but they also extend as far north as Mexico, and the following form is to be added to that fauna:

Neocorynura discolor knabiana subsp. n.

♀.—Length about 8 mm., anterior wing 6.7 (true *discolor* 9 mm., wing 7.5 mm.); first abdominal segment reddish-black, brilliant green at sides and base; second segment with laterobasal corners bright green; third with a green basal band, covered with white tomentum. Antennae red at apex.

Cordoba, Vera Cruz, Mexico, January 20, 1908 (*F. Knab*), U. S. Nat. Museum.

Differs from typical *N. discolor*, as described by Smith, and again (from four examples collected by Sallé) by Vachal. in the green base of abdomen. The wings are greyish, with the marginal cell and beyond broadly fuliginous. This is also very near *N. chlorocion* (Vachal), but is easily separated by the black face. It is also related to *N. lignys* (Vachal), which Mr. Knab took at Cordoba on the same day.

The following key separates this from a series of Mexican and Central American specimens now before me, and records some new localities:

Abdomen elongated, distinctly claviform, segments 2 and 3 green at base; males. (Cordova, Mexico, May 10, *L. O. Howard*)*,

N. chlorocion (Vachal)

Abdomen ordinary, or scarcely elongated; females.....1

1. First abdominal segment with very large coarse punctures; marginal cell and beyond fuscous (Tabernilla, Canal Zone, Panama, July, 1907, *Aug. Busck*)*N. cuprifrons* (F. Smith)

First abdominal segment not thus punctured.....2

2. Smaller; area of metathorax brilliant pale green,

N. discolor knabiana Ckll.

Larger; area of metathorax not thus green...*N. lignys* (Vachal)

* One of the *N. chlorocion* males carries two stylopids; this adds a genus to the list of those parasitized by Stylopids. The *N. chlorocion* have the wings appreciably dusky and the second abdominal segment quite closely punctured, but they are surely this species, which was originally recorded from Orizaba.

Probably one of these is *Rhopalictus chalcozonis* Sichel, of which Sichel said that he had a series from Mexico, but lacked time and space to describe it. Such time and space were never found, so far as I can discover, and the name remains nude. *Halictus konowii* Ducke is the same as *N. cuprifrons*, as Ducke himself stated. Smith, for no valid reason, described the insect as a *Megalopta*, so Ducke's mistake is not surprising. I have examined Smith's type.

From Chanchamayo, Peru (*Rosenberg*), the U. S. Nat. Museum has specimens of *N. lampter* (Vachal) and *N. lepidodes* (Vachal). The latter was described from Bolivia, and is new to Peru. I have one from Mapiri, Bolivia, sent by Schrottky.

Notes on the Phylogeny of the Orthoptera.*

By G. C. CRAMPTON, Ph.D.

Practically all of those investigators who have recently discussed the phylogeny of the Orthoptera, agree in deriving them from Blattid-like ancestors. In a number of papers dealing with a phylogenetic study of various structural features in insects related to the Orthoptera, I have maintained that the Plecoptera rather than the Blattidae are more like the ancestral stock from which all of these forms are descended, and I would briefly summarize the reason for so thinking in the following discussion.

The appended diagram is offered to aid in visualizing the relationships of the different lines of descent here discussed; but it should be borne in mind that such a diagram should be represented in three dimensions rather than in one plane, if the real relationships of the different groups are to be correctly portrayed. Thus the three lines of descent depicted as though clustering about the Blattids should be represented as though springing off from the main stem at right angles to the plane of the other groups, since these larger groups approach one another from different angles, and the same holds true for the various branches within a larger group; but the diagram as given will serve for all practical purposes.

The "Lepismoid" insects such as *Lepisma*, *Nicoletia*, etc., (with which such forms as *Machilis* might be likewise includ-

*Contribution from the Entomological Laboratory of the Massachusetts Agricultural College, Amherst, Mass.